

Law of Mongolia

, 2003

Ulaanbaatar

On the Conservation and Efficient Use of Energy

Article 1. The purpose of the law

- 1.1. The purpose of this law is to implement the national policy on the conservation and efficient use of energy resources by consumers for the purpose of gaining economic benefits and to improve the protection of the environment.
- 1.2. This Act is to be applied to the production, conversion, storage, transmission, transport, distribution and consumption of energy resources, to secondary energy sources, as well as to products derived from energy resources, and to buildings, manufacturing processes, transportation and consumer products utilizing energy resources, including secondary energy sources.

Article 2. Legislation on Energy Conservation and Efficiency

- 2.1. Legislation on energy efficiency shall consist of this law and other legal acts adopted in conformity with this law.

Article 3. Definitions

- 3.1. In this law, the terms listed below shall have the following definitions:
 - 3.1.1. “Accredited energy auditor” means an auditor possessing qualifications specified in Art. 12.4;
 - 3.1.2. “Building” means any structure or part of a structure, which is having a connected load of 500 kW or contract demand of 600 kVa and above and is intended to be used for commercial purposes;
 - 3.1.3. “Chairperson” means the Chairman or Chairwoman of the Governing Council;

- 3.1.4. “Designated consumer” means any consumers specified under Art. 14.3;
- 3.1.5. “Energy audit” means the verification, monitoring and analysis of use of energy including submission of technical report containing recommendations for improving energy efficiency with cost benefit analysis and an action plan to reduce energy consumption;
- 3.1.6. "Energy conservation" means efficient utilization of energy and reduction of energy losses by means of managing improvement of consumption and taking environmentally sound, and economically and technologically rational and socially acceptable measures;
- 3.1.7. “Energy conservation building codes” means the norms and standards of energy consumption expressed in terms of per square meter of the area wherein energy is used;
- 3.1.8. “Energy efficiency” means the rate of effectiveness of energy processes, defined as a percentage ratio of the total energy output and the total energy input of the same process, that is, there is an increase in energy efficiency when energy levels are decreased for a given level of service;
- 3.1.9. “Energy efficiency standard” means the standard for a product or a class of energy-using products that includes that product;
- 3.1.10. “Designated energy facilities” means industrial and commercial enterprises subject to energy management;
- 3.1.11. “Energy Management Center” means the Energy Management Center established by this Act.
- 3.1.12. “Energy management” means a broad range of activities relating to the business of energy management and demand-side management in the production, transmission, transport, distribution, and consumption of energy with the aim to achieve energy use reduction and cost savings;
- 3.1.13. “Energy manager” means any individual possessing the qualifications set forth in Art. 14.3.2;
- 3.1.14. “Energy resources” means non-renewable energy sources, whose energy potential is exploited in energy facilities, including those derived from fossil fuels and nuclear fission, and renewable sources of energy, such as hydro-power, biomass, wind and solar power, and geothermal heat;
- 3.1.15. “Fuel” means coal, oil and natural gas and their derivative products;
- 3.1.16. "Fuel equivalent" means fuel, which has the quality of 7000 Kcal per 1 kg;
- 3.1.17. “Fund” means the Fund for Energy Conservation and Efficiency;
- 3.1.18. “Governing Council” means the Governing Council of the Fund;
- 3.1.19. “Member” means the member of the Governing Council and includes the Chairperson;
- 3.1.20. “Products or class of products” means specified machinery, devices, appliances and equipment;

- 3.1.21. “Public use” means the use of energy for public transportation and for lighting of municipalities;
- 3.1.22. “Renewable energy” means an exploitable energy source whose energy potential is renewed by natural processes;
- 3.1.23. “Secondary energy source” means an exploitable energy source whose energy potential is generated as a by-product of the conversion and final consumption of energy, and of waste disposal.

Article 4. The national policy for energy conservation and efficiency

- 4.1. The national policy for the conservation and efficient use of energy is an integral part of the energy policy of Mongolia as enumerated in “Mongolia’s Sustainable Energy Sector Development Strategy Plan (2002-2010)” and, together with this document’s aims, it incorporates the following principles:
 - 4.1.1. Ensuring efficient and environmentally sound use of energy resources;
 - 4.1.2. Promoting the development of new energy sources, such as renewable energy resources;
 - 4.1.3. Energy conservation to promote efficiency, consumer choice, and environmental sustainability, including more rational energy use to reduce air pollution and emissions of green house gases;
 - 4.1.4. Reducing energy consumption to achieve growth in the gross domestic product of the country;
 - 4.1.5. Increasing energy efficiency in all the sectors of the national economy; lessening of legal, financial and operational barriers to the implementation of energy efficiency;
 - 4.1.6. Stimulating investments in more efficient technologies, equipment, techniques and materials;
 - 4.1.7. Advancing financing solutions for the initiatives related to energy conservation and efficiency ;
 - 4.1.8. Sound market operation in the field of energy, including price formulation that promotes energy conservation and efficiency and environmental protection costs and benefits;
 - 4.1.9. Reducing the negative impact on environment of energy production, transmission, transport, distribution and consumption in all its forms;
 - 4.1.10. Educating to achieve heightened awareness among consumers about all forms of energy to reduce the energy consumption;
 - 4.1.11. Co-operation between the consumers, producers, energy suppliers and governmental authorities toward reaching the objectives set in the national policy of efficient use of energy;
 - 4.1.12. Support of research and development in the field of energy conservation and efficiency measures;

- 4.1.13. Support and encouragement of private sector initiatives and the development of energy services by promoting energy service companies (ESCOs) including energy saving performance contracts;
- 4.1.14. Co-ordination and co-operation with other countries in the field of energy efficiency and to observe the international conventions of which Mongolia is a party;
- 4.1.15. Ensuring accuracy and uniformity in appraising the use of energy.

CHAPTER 2

Article 5. Full Powers of the State Ikh Khural

5.1. The State Ikh Khural shall be responsible to:

- 5.1.1. Provide guidance for the development of energy conservation and efficiency policy in the context of national social and economic development plans and with deference to environmental protection and international environmental obligations.
- 5.1.2. Set the targets for economic growth to be achieved through energy consumption reduction.
- 5.1.3. Approve the plan for the establishment of an Energy Management Center including its purpose, roles and funding.
- 5.1.4. Authorize the inauguration of and the governmental contribution to the financial resources for the Fund for Energy Conservation and Efficiency.

Article 6. Full powers of the Cabinet

6.1. The Cabinet shall exercise the following rights and duties with respect to energy conservation and efficiency:

- 6.1.1. Promote the development of energy saving technology through authorizing legal and regulatory measures affecting a broad extent of the economy, with emphasis on private sector initiatives;
- 6.1.2. Promote and assist the development of renewable energy whenever and wherever that reduces consumption of conventionally produced energy and where such reduce pollution and environmental damage, and prescribe guidelines for advancement and support for such activities;
- 6.1.3. Approve a program for energy conservation and efficiency prepared by the State Central Administrative Organization in charge of energy;
- 6.1.4. Develop a plan for the systematic reduction of energy wasting by industrial, commercial and residential consumers, monitor the trends in energy supply and demand, and approve plans for rational energy

- management, including the selection of consumers or consumer classes designated for energy management;
- 6.1.5. Support the gradual evolution of energy saving measures through approving construction of new major facilities and through approving labeling of energy using products as and when such measures aid the national economy;
- 6.1.6. Prepare and submit to the Ikh Khural a plan for the establishment on an Energy Management Center, and subsequent to approval of its existence and budget, authorize staff for the organization and define its operational rules;
- 6.1.7. Participate in the founding of the Fund for Energy Conservation and Efficiency and direct the Ministry of Finance and Economy regarding setting up the financial mechanisms;
- 6.1.8. Set guidelines for the operation of the Fund;
- 6.1.9. Authorize staffing and expenditures incurred by the Fund's Governing Council;
- 6.1.10. Appoint the head of administrative management of the Energy Management Center.
- 6.1.11. Review and approve its business plan annually.

Article 7. Rights and duties of the State Central Administrative Organization

- 7.1. The State Central Administrative Organization in charge of energy shall exercise the following full powers:
 - 7.1.1. Implement legislation and decisions of the Cabinet on energy conservation and efficiency;
 - 7.1.2. Prepare a national program on efficient use of energy and energy resources, in the sectors of industrial, commercial, residential usage, in transportation and public use, as well for selected manufacturing processes, and submit it for approval to the Cabinet;
 - 7.1.3. Recommend to the Cabinet persons to be appointed to the administrative management of the Energy Management Center to exercise functions in relation to the development, commercialization, promotion and use of energy conservation and efficiency technology;
 - 7.1.4. Propose, in consultation with other ministries and agencies, to the Cabinet:

- 7.1.4.1. Consumers and classes of consumers to be designated for energy management and the guidelines and rules for instituting this process;
- 7.1.4.2. Improvements in building codes (new commercial or industrial construction);
- 7.1.4.3. Manufacturing processes that need incremental adjustment toward more efficient energy use;
- 7.1.4.4. Guidelines for standards, codes and norms for increased energy efficiency in energy-using products or classes of products;
- 7.1.4.5. Regulatory measures for improvement of fuel efficiency.
- 7.1.5. Approve codes and regulations prepared by the Energy Management Center;
- 7.1.6. Report to the government annually on the activities and the expenditures of the Energy Management Center.
- 7.1.7. Approve the business plan of the Energy Management Center.

Article 8. Full Powers of Governors of Aimags, the Capital City, Soums and Districts

- 8.1. Governors of aimags, the capital city, soums and districts shall implement regional energy conservation and efficiency plans as set forth by the government as applicable in their respective territories.
- 8.2. Administrative authorities of localities with a population of more than 20,000 inhabitants are obligated to develop their own energy efficiency programs.

CHAPTER 3

Article 9. The Fund for Energy Conservation and Efficiency

- 9.1. The Fund for Energy Conservation and Efficiency shall be established for the purpose of promoting and assisting improvements in energy consumption, for support of the development and maintenance of energy conservation and efficiency inventions, for renewable energy utilization, and for correction of environmental problems resulting from energy conservation.
- 9.2. The Fund shall establish and maintain a financial guarantee mechanism for underwriting investments with resources of the Fund for Energy Conservation and Efficiency, when commercial loans are not available or are too costly, but the investment is deemed economical and beneficial to the country. This mechanism shall be reviewed, approved and monitored by the Ministry of Economy and Finance.
- 9.3. The Fund shall provide working capital:

- 9.3.1. In the form of loans, grants, and subsidies for investment in and operation of energy conservation programs;
 - 9.3.2. In the form of grants for inventions improving efficiency in the use of energy;
 - 9.3.3. In the form of subsidies for making the public use of energy more efficient;
 - 9.3.4. To the private sector, in the form of loans, grants and guarantees for converting to more efficient energy-using technology, for replacing non-renewable energy with renewable resources and for investments associated with reducing technical losses of energy;
 - 9.3.5. In the form of loans, grants and subsidies for solving environmental problems, such as atmospheric and other emissions of pollutants, resulting from use of energy resources;
- 9.4. The Fund shall also provide support to the Energy Management Center, on a case-by-case basis as merited, with respect to:
- 9.4.1. Education programs increasing public awareness of energy conservation and the dissemination of information about efficiency rating of products;
 - 9.4.2. Demonstration programs and projects on energy conservation, efficiency techniques, environmental protection and correcting environmental problems, as well for technology transfer;
 - 9.4.3. Research and development projects at private, governmental and academic institutions that promote conservation, efficiency and reduction of environmental problems;
 - 9.4.4. Advancement of procedures for testing and elaboration of standards, codes and practices.
- 9.5. The budget of the fund shall be composed of:
- 9.5.1. Budgetary appropriations by the government;
 - 9.5.2. Grants and other donor aid by international agencies;
 - 9.5.3. Fees and penalties for breaching regulated codes and norms;
 - 9.5.4. Interest received on deposits of funds deposited in commercial banks;
and
 - 9.5.5. Surcharges on (commodity to be defined).
- 9.6. Administration of the Fund
- 9.6.1. For the supervision of the Fund a Governing Council shall be established consisting of the following members: Representatives of the Ikh Khural, the Prime Minister's Office, the Minister of Infrastructure, the Minister of Finance and Economy, the Minister of Industry and Agriculture, the Minister of the Environment, members of the Academy of Sciences, representatives of trade associations,

consumer councils, and the State Inspection Authority, the Head of the Standards and Metrology Office (if it exists), the director general of the Energy Management Center and chairman of the board of the Energy Regulatory Authority.

- 9.6.2. The Governing Council shall establish guidelines regarding priorities for the disbursement of the Fund, rules for allocating grants, loans, guarantees and other aid to applicants and shall approve applications for assistance.
- 9.6.3. The Governing Council shall elect its own Chairperson annually. The Chairperson shall report annually to the Ikh Khural.
- 9.6.4. Daily administration of the Fund shall be carried out by the Energy Management Center. The Fund's administrative operation shall be based on a business plan as approved annually by the Governing Council.

Article 10. Functions and responsibilities of the Energy Management Center

- 10.1. The Energy Management Center is constituted as a non-profit agency of the government in charge of implementing energy efficiency and conservation policy and programs endowed with legal standing, functional, organizational and financial autonomy. As such, it shall observe all rules and regulations pertinent to governmental (civil) service. Its administrative expenses shall be borne by the State central budget.
- 10.2. The Center's principal responsibility is promotion of energy efficiency and conservation in the industrial, building, and transportation sectors, as well as in regard to machinery, equipment and consumer appliances, with the following tasks:
 - 10.2.1. Prepare annually a plan for designating certain industries (designated consumers) whose consumption exceeds the levels of 4 GWh and 12 GWh for reducing consumption by such measures as improving fuel combustion, reducing technical losses, recovering waste heat, and submit the plan to government for approval;
 - 10.2.2. Introduce policies or measures which serve to control or influence the demand (demand-side management) in the electricity and heat sector;
 - 10.2.3. Conduct research and development in energy conservation and efficiency measures, including techniques, processes, practices and designs, both in-house and through contractual arrangements with other institutions;
 - 10.2.4. Develop and maintain programs for technically and professionally aiding energy conservation and efficiency projects in both the State-owned and the private sector, including energy conversion and renewable energy development projects.

- 10.2.5. Propose to the government financial and tax incentives for energy efficiency investments and for renewable energy.
- 10.2.6. Propose tariff incentives in regard to renewable energy or energy savings achieved for the consideration of the Energy Regulatory Authority.
- 10.2.7. Develop technical standards, codes and regulations for energy conservation and efficiency for products and/or classes of products to be approved by the State Central Administration in charge of energy within one year of the enactment of this law. The codes shall take into account international practices and codes, such as the International Energy Conservation Code, be coherent with existing standards and norms, allow a gradual phase-in and be suitable for application without adversely affecting the economic well-being of the energy users. Prior to issuing any standard, code or regulation, it shall be subject to publication and review by affected consumers. Comments must be taken into account;
- 10.2.8. Develop a certification procedure for new equipment, machinery, devices, appliances and related products that are users of energy. The procedure shall be approved at the Cabinet level;
- 10.2.9. Develop energy conservation building codes for new and modified multi-family housing, factories, commercial buildings, and power and heat generating and supplying facilities;
- 10.2.10. Promote a means of encouraging the founding of Energy Saving Companies (ESCOs) and provide training in energy audits, as well as develop an accreditation program and accredit institutions as ESCOs to carry out energy audits.
- 10.2.11. Develop guidelines for the ways to monitor the performance of designated consumers' energy management of facilities, gather data, analyze and report.
- 10.2.12. Carry out assessments and prepare or update annually an energy-use plan, incorporating variances in the regions, accounting for mass energy supply, and demand-side management, taking into account the management of the load curves in order to optimize the use of the existing capacities and the development and the use of energy efficient systems and appliances. These include efficient building components and efficient appliances.
- 10.2.13. Maintain a data base of energy production, imports and demand, prepare annually energy balance sheets and a summary of energy audits completed by the ESCOs.
- 10.2.14. Set up and maintain a public awareness campaign to inform the consumers of energy about energy conservation and efficiency measures that are either voluntary or decreed by codes, standards, are norms, or are established by other regulations.
- 10.2.15. Set up a council of representatives of all stakeholders (manufacturers, importers, consumers, government) as advisory body to consult about

- 10.2.15.1. establishing baselines and developing methodology for energy efficiency;
 - 10.2.15.2. calculating the economic cost and impact of new codes standards and regulations,
 - 10.2.15.3. determining potential displacement of generating capacity;
 - 10.2.15.4. examining ways to increase the development and use of renewable energy;
 - 10.2.15.5. choosing target products and target industries for increasing efficiency;
 - 10.2.15.6. choosing target limits for products and classes of products on energy performance;
 - 10.2.15.7. devising, reviewing, modifying and recommending standards, and agreeing on the implementation strategy.
- 10.2.16. Help establish a voluntary energy efficiency industry partnership that
- 10.2.16.1. raises the level of awareness and understanding about how saving energy both saves money and protects the environment;
 - 10.2.16.2. provides information about and access to technology;
 - 10.2.16.3. develops the domestic capacity to deliver energy efficiency products and services, and
 - 10.2.16.4. promotes market development through policies and programs that encourage the adoption and use of energy-saving products and services.
- 10.2.17. Cooperate with international institutions involved in energy standards and certification for improving procedures domestically and for assessing economic benefits or disadvantages.
- 10.2.18. Coordinate energy efficiency programs funded by international institutions and approved by the government.
- 10.2.19. Prepare and submit a report annually to the Minister in charge energy on the concluding fiscal year's accomplishments together with a business plan for the following year.

CHAPTER 4

Article 11. Standards of energy conservation and efficiency

- 11.1. Energy efficiency performance characteristics shall be established for energy-producing and energy-using equipment. The standards shall include energy consumption characteristics for technological processes, provision of heat and hot water supply, cooling, provision of electricity supply, lighting of buildings, equipment, machinery and appliances, and vehicles. The characteristics shall be determined either through test procedures and comparison to other models, or by setting target limits on energy performance of certain products or classes of products.

- 11.2. Each energy-using product, designated either by unit product or class of products by the Energy Management Center, which is newly manufactured or imported must carry a label of certification. No product can be sold, used or leased without such label. This requirement does not extend to products or classes of products predating this law, those for the needs of national security or goods already complying with adopted European or international standards.
- 11.3. Energy quality shall meet the requirements established by the relevant standards.
- 11.4. Energy conservation codes for buildings shall be developed and presented for approval to the government. The codes shall set minimum requirements for the energy efficient design of new buildings and major renovation projects so that they may be constructed, operated and maintained in a manner that minimizes the use of energy without constraining the building function or the comfort and productivity of the occupants.
- 11.5. Procedures shall be devised to encourage code compliance.

CHAPTER 5

Article 12. Energy audits

- 12.1. Energy audits shall be compulsory for:
 - 12.1.1. All enterprises applying for subsidies or tax benefits under the Energy Conservation and Efficiency program of the Fund;
 - 12.1.2. All state-owned enterprises whose total consumption of energy is higher than the standard stipulated by codes and regulations;
 - 12.1.3. Whenever new or modified facilities' consumption shows upon completion to exceed the standards stipulated by codes and regulations.
- 12.2. Audits may be carried out either by:
 - 12.2.1. Certified professionals of the Energy Management Center, and/or
 - 12.2.2. Energy efficiency and conservation service companies (ESCOs), when properly accredited.
- 12.3. Accredited energy auditors are those who are certified and licensed by the Energy Management Center and will be the only examiners acceptable to conduct audits and will report the results as well as suggestions for improvement to the affected enterprise.
- 12.4. To be an accredited auditor, the person must
 - 12.4.1. Have passed the expert examination
 - 12.4.2. Has full legal rights

- 12.4.3. Has appropriate education and experience in the technical field appropriate to the audit
- 12.4.4. Has not been convicted of any crime.
- 12.5. The cost of energy audits shall be borne by the enterprise undergoing an audit.
- 12.6. The fee schedule will be determined by regulation by the Energy Management Center.
- 12.7. Commercial enterprises shall arrange remuneration in the form of performance contracts with ESCOs undertaking energy management improvements prior to audits. The contracts shall be based on achieved energy savings of demonstrable economic benefit to the enterprise.
- 12.8. In the case of State-owned entities (hospitals, schools, government offices, etc.) for which ESCOs undertake energy management and improvement, the ESCOs are eligible to apply for a 50% reduction in their corporate income tax for the first 5 years of their operation.
- 12.9. Upon completion of an audit, the auditor(s) shall submit a written report containing:
 - 12.9.1. An evaluation of the energy balance of the facility and whether codes, norms and regulations have been breached
 - 12.9.2. Recommendations for energy saving measures that rectify the situation, their cost and the attainable savings resulting from implementing those measures

Article 13. Energy conservation and efficiency regulations

- 13.1. The Energy Management Center is tasked to develop target standards of performance , codes and regulations within one year of the enactment of this law for the following sectors of the economy:
 - 13.1.1. Consumer goods: New major appliances using electricity (stoves, air conditioners, dishwashers, ovens, refrigerators, televisions, fluorescent lighting, copying machines, computers, video recorders) that are manufactured or imported, and whose volume of sales is substantial to merit improvement of energy performance;
 - 13.1.2. Construction of new buildings and renovations of existing edifices for public purposes, such as schools, hospitals, government buildings,

- department stores, office buildings, etc.: insulation of walls, ceilings, floors and windows, central air-conditioning, heating and ventilation equipment, elevators, etc. Construction of private dwellings are exempted.
- 13.1.3. Transport sector: imported passenger cars and trucks weighing more than 2.5 tons, as well as heavy equipment, in regards to their fuel performance efficiency and pollution abatement.
- 13.2. Proposed standards for consumer goods shall take into account international standards of testing and certification, and shall be evaluated against impact on the economy, including the manufacturing sector, importers and the public's acceptance.
- 13.3. Proposed energy standards for buildings shall be tested by architects, developers and energy managers.
- 13.4. Proposed motor vehicle and related fuel performance standards shall be determined in consultation with the Ministries in charge of transportation and petroleum products.
- 13.5. All proposed standards, to be codified into regulations shall be approved by the Cabinet of Ministers with a view of cost and impact on the economy. The Cabinet shall authorize the timeframe of phasing in each standard.

CHAPTER 6

Article 14. Duties of energy consumers

- 14.1. All consumers are obligated to:
- 14.1.1. Observe standards, technical regulations and norms in force concerning the efficiency of energy use and these are equally mandatory for all energy producers, suppliers and consumers, including the design, construction, use, maintenance, and repair or modification of their own installations and the associated energy-using equipment,
- 14.1.2. Equip their facilities with monitoring systems for the total energy consumption of the installation, and
- 14.1.3. Make available to auditors information about the performance of their facilities when so requested.
- 14.2. Designated consumers:

- 14.2.1. Industrial and commercial enterprises whose annual consumption exceeds the equivalent of 12 GWh per year (10.6608 billion Kcal fuel equivalent), shall be classified as designated energy consumers.
 - 14.2.2. Designated consumers shall employ one or more energy managers in their facilities. The managers shall have proper training and accreditation by the Energy Management Center.
 - 14.2.3. Energy managers shall be responsible for maintaining the facilities for the consumption of fuel, electricity and heat, and for improving the energy efficiency of the facility. Energy managers of designated consumer's facilities shall develop programs to reduce their energy consumption gradually adhering to guidelines. The facility's energy consumption, balance and energy efficiency indices shall be monitored by the energy manager(s) and a report about the facility's performance shall be submitted to the Energy Management Center annually.
 - 14.2.4. Designated facilities whose consumption ranges between 12 and 4 GWh (10.6608 billion Kcal fuel equivalent), will be required to prepare and submit an energy balance calculation every two years.
- 14.3. The producers and importers energy using products, specifically, machinery, devices, appliances and equipment, as well as motor vehicles are obliged to adhere to the codes and standards and must have the product or class of products tested by a designated and accredited institution prior to be certified by the Energy Management Center.
- 14.4. No certificate is needed for products complying with European or international labeling standards.

Article 15. Monitoring and Enforcement

THIS SECTION IS PURPOSEFULLY LEFT BLANK. THE MONGOLIAN PRACTICE OF ISSUING FINES AGAINST INDIVIDUALS RATHER THAN COMPANIES, AND THE OBJECTIONS TO A VARIETY OF SANCTIONS MAKE THIS USELESS TO WRITE AT THIS STAGE.